

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1 – 16 (Cancelled)

17. (Currently Amended) A carbinol-functional silicone resin comprising the units:

$(R^1_3SiO_{1/2})_a$ (i)

$(R^2_2SiO_{2/2})_b$ (ii)

$(R^3SiO_{3/2})_c$ (iii) and

$(SiO_{4/2})_d$ (iv)

wherein R^1 and R^2 are each independently a hydrogen atom, an alkyl group having from 1 to 8 carbon atoms, an aryl group, or a carbinol group free of aryl groups having at least 3 carbon atoms, or an aryl-containing carbinol group having at least 6 carbon atoms, R^3 is an alkyl group having from 1 to 8 carbon atoms or an aryl group, a has a value of less than or equal to 0.6, b has a value of zero or greater than zero, c has a value of greater than zero, d has a value of less than 0.5, and the value of $a + b + c + d = 1$, with the proviso that when each R^2 is methyl the value of b is less than 0.3 and with the proviso there is on average at least one carbinol group per resin molecule and greater than 10 wt% of the $R^1+R^2+R^3$ groups in the carbinol-functional silicone resin are phenyl.

18. (Currently Amended) A carbinol-functional silicone resin of claim 17 wherein the alkyl group is methyl; the aryl group is phenyl; the carbinol group free of aryl groups having at least 3 carbon atoms is selected from a group having the formula R^4OH wherein R^4 is selected from

(1) a group having the formula $-(CH_2)_x-$ where x has a value of 3 to 10,

- (2) -CH₂CH(CH₃)-,
- (3) -CH₂CH(CH₃)CH₂-,
- (4) -CH₂CH₂CH(CH₂CH₃)CH₂CH₂CH₂-, and
- (5) a group having the formula -OCH(CH₃)(CH₂)_x- wherein x has a value of 1 to 10

and a group having the formula R⁶(OH) wherein R⁶ is a group having the formula -

CH₂CH₂(CH₂)_xOCH₂CH- wherein x in each case has a value of 1 to 10;

~~the aryl-containing carbinol group having at least 6 carbon atoms is a group having the formula R⁵OH wherein R⁵ is selected from~~

- (1) a group having the formula -(CH₂)_xC₆H₄- wherein x has a value of 0 to 10;
- (2) a group having the formula -CH₂CH(CH₃)(CH₂)_xC₆H₄- wherein x has a value of 0 to 10, and
- (3) a group having the formula -(CH₂)_xC₆H₄(CH₂)_x- wherein x has a value of 1 to 10.

19. (Currently amended) The carbinol-functional silicone resin of Claim 17 where a has a typical value of 0.1 to 0.6, b has a typical value of 0 to 0.4, c has a typical value of 0.3 to 0.8, and d has a typical value of 0 to 0.3.

20. (Currently amended) The carbinol-functional silicone resin according to Claim 17 wherein the carbinol-functional silicone resin is selected from

~~carbinol-functional silicone resins comprising the units:~~

$\text{((CH}_3\text{)}_3\text{SiO}_{1/2})_a$

$\text{((R}^2\text{)}\text{CH}_3\text{SiO}_{2/2})_b$ where $\text{R}^2 = \text{-(CH}_2\text{)}_3\text{C}_6\text{H}_4\text{OH}$

$\text{((C}_6\text{H}_5\text{)}\text{CH}_3\text{SiO}_{2/2})_b$ and

$\text{C}_6\text{H}_5\text{SiO}_{3/2}\text{e}^-$

~~carbinol-functional silicone resins comprising the units:~~

$((R^+)(CH_3)_2SiO_{1/2})_a$, where $R^+ = -(CH_2)_3C_6H_4OH$ and
 $(C_6H_5SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((R^+)(CH_3)_2SiO_{1/2})_a$, where $R^+ = -(CH_2)_3C_6H_4OH$ and
 $(CH_3SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((R^1)(CH_3)_2SiO_{1/2})_a$ where $R^1 = -(CH_2)_3OH$ and
 $(C_6H_5SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((R^1)(CH_3)_2SiO_{1/2})_a$ where $R^1 = -(CH_2)_3OH$

$(CH_3SiO_{3/2})_c$ and

$(C_6H_5SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((CH_3)_3SiO_{1/2})_a$

$((R^2)CH_3SiO_{2/2})_b$ where $R^2 = -(CH_2)_3OH$

$((C_6H_5)CH_3SiO_{2/2})_b$ and

$(C_6H_5SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((CH_3)_3SiO_{1/2})_a$

$((R^1)(CH_3)_2SiO_{1/2})_a$ where $R^1 = -(CH_2)_3OH$ and

$(C_6H_5SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((R^1)(CH_3)_2SiO_{1/2})_a$ where $R^1 = -CH_2CH(CH_3)CH_2OH$

$((H)(CH_3)_2SiO_{1/2})_a$ and

$(C_6H_5SiO_{3/2})_c$,

wherein a has a typical value of 0.1 to 0.6, b has a typical value of zero to 0.4, and c has a typical value of 0.3 to 0.8.

21. (Previously Presented) The carbinol-functional silicone resin according to Claim 17, wherein greater than 25 weight percent of the $R^1+R^2+R^3$ groups are phenyl.

22. (Currently Amended) A carbinol-functional silicone resin comprising the units:

$(R^1_3SiO_{1/2})_a$ (i)

$(R^2_2SiO_{2/2})_b$ (ii)

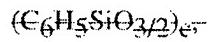
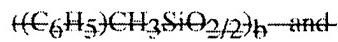
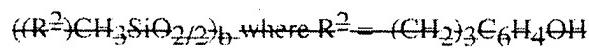
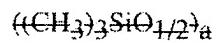
$(R^3SiO_{3/2})_c$ (iii) and

$(SiO_{4/2})_d$ (iv)

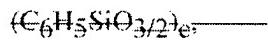
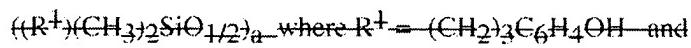
wherein R^1 is independently a hydrogen atom, an alkyl group having from 1 to 8 carbon atoms, an aryl group, or a carbinol group free of aryl groups having at least 6 carbon atoms, or an aryl-containing carbinol group having at least 6 carbon atoms; R^2 is a hydrogen atom, an alkyl group having from 1 to 8 carbon atoms, an aryl group, or a carbinol group free of aryl groups having at least 3 carbon atoms, or an aryl-containing carbinol group having at least 6 carbon atoms; R^3 is an alkyl group having from 1 to 8 carbon atoms or an aryl group, a has a value of less than or equal to 0.6, b has a value of zero or greater than zero, c has a value of greater than zero, d has a value of less than 0.5, and the value of $a + b + c + d = 1$, and with the proviso that when each R^2 is methyl the value of b is less than 0.3 and with the proviso that greater than 25 wt% of the $R^1+R^2+R^3$ groups in the carbinol-functional silicone resin are phenyl.

23. (Currently amended) The carbinol-functional silicone resin according to Claim 22 wherein the carbinol-functional silicone resin is selected from

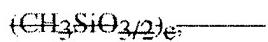
carbinol-functional silicone resins comprising the units:



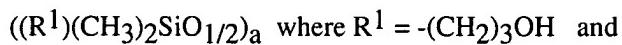
carbinol-functional silicone resins comprising the units:



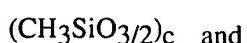
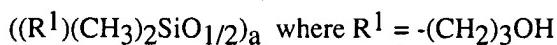
carbinol-functional silicone resins comprising the units:



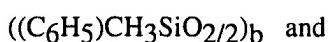
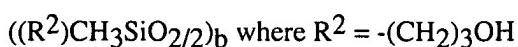
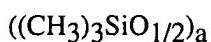
carbinol-functional silicone resins comprising the units:



carbinol-functional silicone resins comprising the units:



carbinol-functional silicone resins comprising the units:



carbinol-functional silicone resins comprising the units:

$((\text{CH}_3)_3\text{SiO}_{1/2})_a$

$((\text{R}^1)(\text{CH}_3)_2\text{SiO}_{1/2})_a$ where $\text{R}^1 = -(\text{CH}_2)_3\text{OH}$ and

$(\text{C}_6\text{H}_5\text{SiO}_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((\text{R}^1)(\text{CH}_3)_2\text{SiO}_{1/2})_a$ where $\text{R}^1 = -\text{CH}_2\text{CH}(\text{CH}_3)\text{CH}_2\text{OH}$

$((\text{H})(\text{CH}_3)_2\text{SiO}_{1/2})_a$ and

$(\text{C}_6\text{H}_5\text{SiO}_{3/2})_c$,

wherein a has a typical value of 0.1 to 0.6, b has a typical value of zero to 0.4, and c has a typical value of 0.3 to 0.8.

24. (Previously presented) A method of preparing carbinol-functional silicone resins comprising reacting:

(A') at least one hydrogen-functional silicone resin comprising the units:

$(\text{R}^7_3\text{SiO}_{1/2})_a$ (i)

$(\text{R}^8_2\text{SiO}_{2/2})_b$ (ii)

$(\text{R}^3\text{SiO}_{3/2})_c$ (iii) and

$(\text{SiO}_{4/2})_d$ (iv)

wherein R^7 and R^8 are each independently an alkyl group having from 1 to 8 carbon atoms, an aryl group, or a hydrogen atom, R^3 is an alkyl group having from 1 to 8 carbon atoms or an aryl group, a has a value of less than or equal to 0.6, b has a value of zero or greater than zero, c has a value of greater than zero, d has a value of less than 0.5, the value of $a + b + c + d = 1$, with the proviso that when each R^8 is methyl the value of b is less than 0.3, with the proviso that there are at least two silicon-bonded hydrogen atoms present in the silicone resin and with the proviso that greater than 10 wt% of the $\text{R}^7+\text{R}^8+\text{R}^3$ groups are phenyl; and (B') at least one vinyl-terminated alcohol; in the presence of (C') a hydrosilylation catalyst; and optionally (D') at least one solvent.

25. (Currently amended) The method of preparing carbinol-functional silicone resins according to Claim 24 where a has a typical value of 0.1 to 0.6, b has a typical value of 0 to 0.4, c has a typical value of 0.3 to 0.8, and d has a typical value of 0 to 0.3.

26. (Currently amended) The method of preparing carbinol-functional silicone resins according to Claim 24 where the hydrogen-functional silicone resins of (A) are selected from hydrogen-functional silicone resins comprising the units:

$((CH_3)_3SiO_{1/2})_a$

$((H)CH_3SiO_{2/2})_b$

$((C_6H_5)CH_3SiO_{2/2})_b$ and

$(C_6H_5SiO_{3/2})_c$,

hydrogen-functional silicone resins comprising the units:

$((H)(CH_3)_2SiO_{1/2})_a$

$(C_6H_5SiO_{3/2})_c$,

hydrogen-functional silicone resins comprising the units:

$((H)(CH_3)_2SiO_{1/2})_a$

$(CH_3SiO_{3/2})_c$,

hydrogen-functional silicone resins comprising the units:

$((H)(CH_3)_2SiO_{1/2})_a$

$(CH_3SiO_{3/2})_c$ and

$(C_6H_5SiO_{3/2})_c$,

and

hydrogen-functional silicone resins comprising the units:

$((CH_3)_3SiO_{1/2})_a$

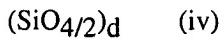
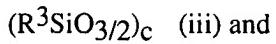
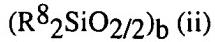
$((H)(CH_3)_2SiO_{1/2})_a$



wherein a has a typical value of 0.1 to 0.6, b has a typical value of 0 to 0.4, and c has a typical value of 0.3 to 0.8.

27. (Previously presented) A method of preparing carbinol-functional silicone resins comprising reacting:

(A') at least one hydrogen-functional silicone resin comprising the units:



wherein R⁷ and R⁸ are each independently an alkyl group having from 1 to 8 carbon atoms, an aryl group, or a hydrogen atom, R³ is an alkyl group having from 1 to 8 carbon atoms or an aryl group, a has a value of less than or equal to 0.6, b has a value of zero or greater than zero, c has a value of greater than zero, d has a value of less than 0.5, the value of a + b + c + d = 1, with the proviso that when each R⁸ is methyl the value of b is less than 0.3, with the proviso that there are at least two silicon-bonded hydrogen atoms present in the silicone resin and with the proviso that greater than 30 wt% of the R⁷+R⁸+R³ groups are phenyl; and (B') at least one vinyl-terminated alcohol; in the presence of (C') a hydrosilylation catalyst; and optionally (D') at least one solvent.

28. (Currently amended) The method of preparing carbinol-functional silicone resins according to Claim 276 where a has a typical value of 0.1 to 0.6, b has a typical value of 0 to 0.4, c has a typical value of 0.3 to 0.8, and d has a typical value of 0 to 0.3

29. (Currently amended) An emulsion composition comprising: (A) a carbinol-functional silicone resin comprising the units:

$(R^1_3SiO_{1/2})_a$ (i)

$(R^2_2SiO_{2/2})_b$ (ii)

$(R^3SiO_{3/2})_c$ (iii) and

$(SiO_{4/2})_d$ (iv)

wherein R^1 and R^2 are each independently a hydrogen atom, an alkyl group having from 1 to 8 carbon atoms, an aryl group, a carbinol group free of aryl groups having at least 3 carbon atoms, or an aryl-containing carbinol group having at least 6 carbon atoms, R^3 is an alkyl group having from 1 to 8 carbon atoms or an aryl group, a has a value of less than or equal to 0.6, b has a value of zero or greater than zero, c has a value of greater than zero, d has a value of less than 0.5, and the value of $a + b + c + d = 1$, and with the provisos that when each R^2 is methyl the value of b is less than 0.3, ~~greater than 10 weight percent of the $R^1+R^2+R^3$ groups are phenyl,~~ and ~~with the proviso there is on average at least one carbinol group per resin molecule;~~ (B) at least one surfactant; and (C) water.

30. (Previously presented) The emulsion composition according to claim 29 wherein the alkyl group is methyl;

the aryl group is phenyl;

the carbinol group free of aryl groups having at least 3 carbon atoms is selected from a group having the formula R^4OH wherein R^4 is selected from

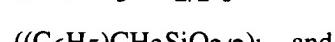
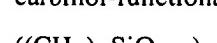
- (1) a group having the formula $-(CH_2)_x-$ where x has a value of 3 to 10,
- (2) $-CH_2CH(CH_3)-$,
- (3) $-CH_2CH(CH_3)CH_2-$,
- (4) $-CH_2CH_2CH(CH_2CH_3)CH_2CH_2CH_2-$, and
- (5) a group having the formula $-OCH(CH_3)(CH_2)_x-$ wherein x has a value of 1 to 10

and a group having the formula $R^6(OH)$ wherein R^6 is a group having the formula -
 $CH_2CH_2(CH_2)_xOCH_2CH-$ wherein x in each case has a value of 1 to 10;
the aryl-containing carbinol group having at least 6 carbon atoms is a group having the formula
 R^5OH wherein R^5 is selected from

- (1) a group having the formula $-(CH_2)_xC_6H_4-$ wherein x has a value of 0 to 10,
- (2) a group having the formula $-CH_2CH(CH_3)(CH_2)_xC_6H_4-$ wherein x has a value of 0 to 10, and
- (3) a group having the formula $-(CH_2)_xC_6H_4(CH_2)_x-$ wherein x has a value of 1 to 10.

31. (Currently amended) The emulsion composition according to Claim 29 wherein
where a has a typical value of 0.1 to 0.6, b has a typical value of 0 to 0.4, c has a typical value of
0.3 to 0.8, and d has a typical value of 0 to 0.3.

32. (Currently amended) The emulsion composition according to Claim 29 wherein the
carbinol-functional silicone resin is selected from
carbinol-functional silicone resins comprising the units:



carbinol-functional silicone resins comprising the units:



carbinol-functional silicone resins comprising the units:



$(CH_3SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((R^1)(CH_3)_2SiO_{1/2})_a$ where $R^1 = -(CH_2)_3OH$ and

$(C_6H_5SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((R^1)(CH_3)_2SiO_{1/2})_a$ where $R^1 = -(CH_2)_3OH$

$(CH_3SiO_{3/2})_c$ and

$(C_6H_5SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((CH_3)_3SiO_{1/2})_a$

$((R^2)CH_3SiO_{2/2})_b$ where $R^2 = -(CH_2)_3OH$

$((C_6H_5)CH_3SiO_{2/2})_b$ and

$(C_6H_5SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((CH_3)_3SiO_{1/2})_a$

$((R^1)(CH_3)_2SiO_{1/2})_a$ where $R^1 = -(CH_2)_3OH$ and

$(C_6H_5SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((R^1)(CH_3)_2SiO_{1/2})_a$ where $R^1 = -CH_2CH(CH_3)CH_2OH$

$((H)(CH_3)_2SiO_{1/2})_a$ and

$(C_6H_5SiO_{3/2})_c$,

carbinol-functional silicone resins comprising the units:

$((R^1)(CH_3)_2SiO_{1/2})_a$ where $R^1 = -(CH_2)_3OH$

$(CH_3SiO_{3/2})_c$

wherein a has a typical-value of 0.1 to 0.6, b has a typical-value of zero to 0.4, and c has a typical-value of 0.3 to 0.8.

33. (Cancelled)

34. (Previously presented) The emulsion composition according to Claim 29 wherein the emulsion composition further comprises at least one ingredient selected from fragrances, preservatives, vitamins, ceramides, amino-acid derivatives, liposomes, polyols, botanicals, conditioning agents, glycols, vitamin A, vitamin C, vitamin E, Pro-Vitamin B5, sunscreen agents, humectants, preservatives, emollients, occlusive agents, esters, pigments, and self-tanning agents.

35 (Currently amended) The emulsion composition according to Claim 31³³ wherein the emulsion composition further comprises at least one ingredient selected from fragrances, preservatives, vitamins, ceramides, amino-acid derivatives, liposomes, polyols, botanicals, conditioning agents, glycols, vitamin A, vitamin C, vitamin E, Pro-Vitamin B5, sunscreen agents, humectants, preservatives, emollients, occlusive agents, esters, pigments, and self-tanning agents.